CLAIMS

Amend the claims as follows.

1.   (Currently Amended) A method, comprising:

scanning a document to determine a plurality of actual gray level values for a plurality of pixels scanned from the document;

scanning a continuous longitudinal calibration ~~black~~ pattern while scanning the document to determine a correctional gray level value associated with the calibration pattern ~~for complete black;~~

~~scanning a continuous longitudinal white pattern while scanning the document to determine a correctional gray level value for complete white;~~

determining a compensational gray level value with respect to the actual gray level value for each of the pixels, wherein the compensational gray level value is based at least in part on the correctional gray level value ~~for complete black, the correctional gray level value for complete white,~~ and the actual gray level values for each of the pixels scanned from the document; and

compensating for image brightness in a scanned image of the document using the compensational gray level value for each of the pixels.

2.   (Currently Amended) The method according to claim 1, wherein the method is used in a scanner and the scanner comprises:

a top;

a scanning chassis configured to be movable under the top along a scanning path; and

a scanning platform disposed at the top, wherein the scanning platform is configured to support the document above the scanning chassis,

wherein the calibration ~~longitudinal white~~ pattern is positioned along a lateral side of the scanning platform and extends continuously along substantially an entire length of the scanning path ~~and wherein the longitudinal white pattern is positioned laterally adjacent to the longitudinal black pattern and extends continuously along substantially the entire length of the scanning path.~~

3.   (Currently Amended) The method according to claim 1, further comprising:

scanning a second continuous longitudinal calibration pattern while scanning the document to determine a second correctional gray level associated with the calibration pattern, wherein the first correctional gray level is for black, wherein the second correctional gray level is for white, and wherein determining the compensational gray level value for each of the pixels comprises:

calculating [(each of the actual gray level values with respect to each of the pixels - the correctional gray level value for ~~complete~~ black) ÷ (the correctional gray level value for ~~complete~~ white - the correctional gray level value for ~~complete~~ black) * (a theoretical gray level value for ~~complete~~ white - a theoretical gray level value for ~~complete~~ black)].

4.   (Previously Presented) A method, comprising:

scanning a document and a continuous longitudinal white pattern, at the same time;

determining a plurality of actual gray level values for a plurality of pixels scanned from the document;

determining a correctional gray level value for white based at least in part on the longitudinal white pattern;

determining a compensational gray level value with respect to the actual gray level values for each of the pixels based at least in part on the correctional gray level value for white, a theoretical gray level value for white, and the actual gray level values for each of the pixels; and

compensating a scanned image of the document using the compensational gray level value for each of the pixels.

5.   (Previously Presented) The method according to claim 4, wherein the method is used in a scanner and the scanner comprises:

a top;

a scanning chassis configured to be movable under the top along a scanning path; and

a scanning platform disposed at the top, wherein the scanning platform is configured to support the document above the scanning chassis,

wherein the longitudinal white pattern is positioned on the top along a lateral side of the scanning platform and extends continuously along substantially an entire length of the scanning path.

6.   (Previously Presented) The method according to claim 5, wherein determining the compensational gray level value for each of the pixels comprises:

calculating [each of the actual gray level values with respect to each of the pixels * (the theoretical gray level value for white ÷ the correctional gray level value for white)].

7.   (Previously Presented) A method, comprising:

scanning a document and a continuous longitudinal black pattern at the same time;

determining a plurality of actual gray level values for a plurality of pixels from the document;

determining a correctional gray level value for black based at least in part on the longitudinal black pattern;

determining a compensational gray level value with respect to the actual gray level values for each of the pixels based at least in part on the correctional gray level value for black, a theoretical gray level value for black, and the actual gray level values for each of the pixels; and

compensating a scanned image of the document using the compensational gray level value for each of the pixels.

8.   (Previously Presented) The method according to claim 7, wherein the method is used in a scanner, and the scanner comprises:

a top;

a scanning chassis configured to be movable under the top along a document scanning path; and

a scanning platform disposed in the top, wherein the scanning platform is configured to support the document above the scanning chassis,

wherein the longitudinal black pattern is positioned on the top along a lateral side of the scanning platform and extends continuously along substantially an entire length of the document scanning path.

9.   (Previously Presented) The method according to claim 7, wherein determining the compensational gray level value for each of the pixels comprises:

calculating [each of the actual gray level values with respect to each of the pixels - (the correctional gray level value for black - the theoretical gray level value for black)].

10.   (Currently Amended) An apparatus comprising:

~~a top portion having a surface;~~

a scanning element configured to be moveable ~~under the top portion~~ in a document scanning direction;

a scanning platform ~~disposed at the top portion, the scanning platform~~ configured to support a document ~~above the scanning element~~;

a reference pattern disposed ~~on the surface of the top portion~~ adjacent to the scanning platform ~~and elongated in the document scanning direction~~, wherein the reference pattern is at least as long as the scanning platform in the document scanning direction; and

a processor configured to:

determine actual gray level values for pixels of a scanned image of the document;

determine a correctional gray level value based at least in part on a scanned image of the reference pattern;

determine a compensational gray level value for the pixels of the scanned image based at least in part on the actual gray level and the correctional gray level ~~reference pattern~~; and

compensate the scanned image using the compensational gray level value.

11.   (Cancelled)

12.   (Currently Amended) The apparatus of claim 10 ~~11~~, wherein the reference pattern comprises a continuous black pattern elongated in a direction parallel with the document scanning direction and a continuous white pattern elongated in a direction parallel with the document scanning direction and positioned adjacent to the continuous black pattern, and wherein the processor is further configured to determine a black correctional gray level value from the continuous black pattern and determine a white correctional gray level value from the continuous white pattern.

13. (Previously Presented) The apparatus of claim 12, wherein the processor is further configured to determine the compensational gray level value based at least in part on the black correctional gray level value, the white correctional gray level value, a theoretical gray level value for black, a theoretical gray level value for white, and the actual gray level values.

14. (Currently Amended) The apparatus of claim 10 ~~11~~, wherein the reference pattern comprises a continuous black pattern, and wherein the processor is further configured to determine a black correctional gray level value from the continuous black pattern.

15. (Previously Presented) The apparatus of claim 10, wherein the scanning element is configured to scan both the reference pattern and the document at the same time.

16. (Currently Amended) The apparatus of claim 10 ~~11~~, wherein the reference pattern comprises a continuous white pattern, and wherein the processor is further configured to determine a white correctional gray level value from the continuous white pattern.

17. (Previously Presented) The apparatus of claim 16, wherein the processor is further configured to determine the compensational gray level value based at least in part on the white correctional gray level value, a theoretical gray level value for white, and the actual gray level values.

18. (Previously Presented) The apparatus of claim 10, wherein a length of the reference pattern is parallel to the scanning direction and equal to or greater than a length of the scanning platform.

19. (Currently Amended) An apparatus comprising:
means for scanning a document and a calibration pattern at the same time along a scanning path, wherein the means for scanning comprises one or more scan lines;
means for obtaining actual grey level values from the scanned document and obtaining a correctional ~~compensational~~ grey level value from the scanned calibration pattern, wherein the

actual gray level value and the correctional gray level value are obtained along the one or more scan lines;

means for determining a compensational gray level value based on the actual gray level value and the correctional gray level value; and

means for compensating a gray level of the scanned document ~~image~~ using the ~~actual grey level values and the~~ compensational gray level value.

20. (Previously Presented) The apparatus of claim 19, wherein the means for scanning is further configured to continuously scan both the calibration pattern and the document while moving longitudinally along the scanning path.

21. (Previously Presented) The apparatus of claim 20, wherein the calibration pattern comprises a black pattern and a white pattern that are each elongated in a direction parallel with the scanning path and wherein the means for compensating is further configured to determine a black correctional gray level value from the black pattern and a white correctional gray level value from the white pattern.

22. (Previously Presented) The apparatus of claim 20, wherein the calibration pattern comprises a black pattern, and wherein the means for compensating is further configured to determine a black correctional gray level value from the black pattern.

23. (Previously Presented) The apparatus of claim 20, wherein the calibration pattern comprises a white pattern, and wherein the means for compensating is further configured to determine a white correctional gray level value from the white pattern.

24. (Previously Presented) The apparatus of claim 19, wherein a length of the calibration pattern is equal to or greater than a length of the scanning path.

Claims 25-30. (Cancelled)